# Iowa Power Fund Board – Due Diligence Committee (DDC) **Meeting Minutes**

## February 27, 2008

## Lucas State Office Building, Conference Room 425 321 E. 12th Street, Des Moines, Iowa

#### Call to Order:

Roya Stanley, Chair, called the meeting to order at 1:00 P.M.

#### Roll Call:

Member	Present	Absent
Floyd Barwig		Х
Franklin Codel	conf.call	
Ted Crosbie	conf.call	
Vern Gebhart	Х	
Patricia Higby	Х	
Fred Hubbell	Х	
William [Curt] Hunter		Х
Roya Stanley, nonvoting	Х	

 Also in attendance: OEI staff: Jennifer Wright, Robert Grayson, and Brian Crowe (Recording Secretary); Governor's Office: Deborah Svec-Carstens (associate general counsel, Governor's Office), Power Fund Board: Tom Wind (Vice Chair)

#### **Approval of Agenda:**

Director Stanley requested that agenda item #5 be removed. Mr. Hubbell moved, Mr. Gebhart seconded, to approve the agenda as amended. All members in attendance voted "aye".

#### **Approval of Minutes:**

Mr. Hubbell moved, Ms. Higby seconded, that the Minutes of the January 23, 2008 meeting be approved as written. All members in attendance voted "aye".

#### **DDC Review of Pre-Applications**

Director Stanley suggested that the review of the pre-applications be categorized as "yes", "yes if", "no but", and "no"; with the idea to bin the pre-applications. Mr. Hubbell reported that there are several similar preapplications and suggested that the committee review all similar pre-applications before making a decision.

1001: Home Energy Education Project - this project addresses the idea of energy efficiency education in the residential sector through the media.

The following comments were made:

- this is a statewide project, but the match is fairly small, and suggested a greater match.
- Too much asked, not part of IPF mission
- hard science is far cheaper than the educational approach; utilities are also spending millions of dollars to promote energy efficiency and will spend more if 1.5% goal is passed by legislature.
- these programs should be offered through a university extension program.
- we need some level of education and need to know what currently exists before dismissing all of these projects.
- suggested that the new Governor's energy efficiency bill will substantially increase the utilities expenditure on energy efficiency education.
- concerned about the follow through of the due diligence in the revolving loan program.

Yes- none Yes. if- none No but- Hubbell No- Codel, Crosbie, Gebhart Recusal-Higby

#### 1004: Cedar Falls Utility Project

The following comments were made:

- there are some similarities with project 1001. The revolving loan would be matched dollar for dollar. The program would use existing known strategies for homeowners: home visits and efficiency; and can utilities implement this project themselves across the state? This may be something that already exists.
- this is similar to the shared saving program that exists in Minnesota and Wisconsin (a few exist in Iowa), which has money that promotes EE for commercial and industrial customers; the Governor's 1.5 % energy efficiency proposal would require this measure.
- the Governor's energy efficiency proposal will impact how the committee should act on energy efficiency proposals.
- concerned about the follow through of the due diligence in the revolving loan program.

Yes- none Yes, if- none **No but- Codel, Gebhart, Hubbell** No- Crosbie Recusal-Higby

### 1011: Environmental Education for Power

The following comments were made:

- there was discussion regarding the fact that the Department of Natural Resource's programs could cover this proposal
- WRC could be technical reviewers for IPF proposals, but on a project basis.
- don't necessarily need a marketing group to promote the positive aspects of the Iowa Power Fund.

Yes-none Yes, if- none No but-none **No- Crosbie, Codel, Gebhart, Hubbell** Recusal-Higby

#### 1020: Hybrid Electric Bus Program

The following comments were made:

- appears the applicants are looking for lowa Power Fund to cover the cost of 12 hybrid electric buses
- there is low match, and too many buses included in this request; this is a proven technology.
- suggested that the IPF loan the group money and they could repay to the lowa Power Fund; loan the incremental cost.
- believes that this is proven technology; communities should spearhead.
- believes that there are many proposals that are existing technology and there needs to be a policy regarding how the committee handles existing technology.
- felt that the public money should not be used for private entities to become more competitive.
- buying consortium could link into a national buying pool.
- agreement that the Power Fund Board should make policy recommendations to improve public transit options.

Yes-none Yes, if- Higby No but-none **No- Crosbie, Codel, Gebhart, Hubbell** Recusal-Hunter

#### 1033: Small Business Green House Gas Reduction

- there is a small amount of match
- believes that this proposal did not engage partners, and felt there might be some similar existing program.

- believes that partnerships are very important.
- feels that faculty and staff salary costs should not be a majority of the proposal.

Yes-0 Yes, if- 0 No but-0,

No- Crosbie, Codel, Gebhart, Hubbell

Recusal-Higby

\*\*1038: Annual Energy Poll\*\* - this proposal is an annual poll, which will engage lowan's opinions on energy. The following comments were made:

- there was no match for this project.
- interested in looking at other studies that fall under this topic
- believes that this is a good proposal if there is match; believes there is viability in this study, but questions how the information could be used on an annual basis.
- reported that the utilities are already doing many surveys for compliance.
- felt that compiling the utility services could help if the information was available.
- believes that more clarity may be needed; suggests that there could be feedback requested in a full application.
- believes a majority of the Power Fund money will go into research and development, so it will be some time before we know if the fund is successful
- a survey to gauge statewide opinion could be helpful in creating the lowa Plan for Energy Independence.

Yes- Higby

Yes, if- Crosbie, Codel, Gebhart, Hubbell

No but-none No- none

\*\*1046: Vertical Wind Manufacturer\*\* - a request to fund a start-up vertical wind manufacturer The following comments were made:

- believes a technology review is necessary, and questioned if the proposal would fit better in a
  Department of Economic Development program; believes that there would need to be collateral if the
  project moved forward; believes that this is a project for the Department of Economic Development.
- believes that the company should be able to borrow the start up costs
- believes that the Power Fund could loan the money
- believes that we should share this with the DED
- believes that we should ask if the Power Fund is funding half of their business, and if so, would they
  consider a loan.
- this could be used for a residential or small business application, but it is hard to make them
  economically viable; typically they cost about \$12,000.
- this is an existing technology with a small market, does not believe that there is any wind expertise within the panel of businesses.

Yes- none

Yes, if- Codel, Higby, Hubbell

No but- none No- Crosbie, Gebhart Recusal- Hunter

**1054: Prairie's Iowa's Energy Source** - this proposal is an educational request to create a program related to lowa's prairie and the link to energy.

- needs to have substantiation of funding sources and matches.
- needs to have clarification of subject topic

- believes that the Department of Natural Resources has information on this topic on-line; believes high school Science teachers have training biology and botany, and this project does not fall within the scope
- "Do not want to fund weekend retreats for teachers."
- too much requested of the lowa Power Fund.
- said that Trees Forever has a similar program with the DNR and believes that there needs to be tie in of the programs.
- believes that the committee could possibly match the DOT match if substantiated.

Yes- Higby Yes, if- Hubbell No but-0.

No- Crosbie, Codel, Gebhart

**1071: Photovoltaic Array System Proposal** - University of Iowa is requesting \$1.8 million for a solar array system for a university building, which had a 12-year payback.

The following comments were made:

- reported that the Regent system would not invest in a project with a 12-year payback, and asked why
  the Power Fund should invest in such a proposal.
- believes that a Power Fund investment could set the example for other institutions, but believes that it may not be economical and replicable.
- feels that the Alternative Energy Revolving Loan Program should fund this proposal; believes the fund needs more money, and is a policy question; believes that the educational display could fall under the lowa Power Fund.
- this is proven technology.
- if the Board should look for some demonstration projects; the project might be financeable; believes that
  the committee needs to make a policy decision; believes that the proposal might be escalating utility
  cost.
- suggested a similar program to AERLP for the Iowa Power Fund.

Yes-0 Yes, if- 0, No but-Higby **No- Crosbie, Codel, Gebhart, Hubbell** Recusal- Hunter

\*\*1072: Oakdale Renewable Energy Plant\*\* - the proposal is requesting funding for two internal combustion engine generators and a biogas pipeline for the University of Iowa.

- believes that the incremental cost could be financeable.
- noted that this site on campus has been relatively unused, and now is being utilized more, and will need
  additional energy supply; believes that this project could be funded through other state programs and
  suggests the committee would need a technical review.
- said that the control systems aspect of the application could be innovative and should be reviewed by the committee.
- says that there is a company in Cedar Rapids that is burning methane gas from a landfill; there are a number of companies that are utilizing this technology in Wisconsin.
- believes that the Board could help with the implementation of these technologies, and the committee could have an impact through the committees' policies.
- believes that the committee should invest if the technology can shift the affordability paradigm.
- believes that if the investment encourages educational opportunities, the project should be considered.
- would consider supporting the proposal if there is new technology in the control systems.
- says that the fund calls for commercialization investments; projects do reduce greenhouse gases; the state will need more renewable generation infrastructure; the Power Fund should invest in projects that have larger paybacks.
- is interested in this proposal if the applicant would be interested in a smaller amount from the Power Fund; there are some issues with the pipeline; has the project been submitted in their overall budget to the regents?

Yes- none Yes, if- Higby **No but- Crosbie, Codel, Gebhart, Hubbell** No- none Recusal- Hunter

**1002: HVAC Performance Training** - this proposal would be a series of trainings for homeowners and HVAC professionals.

The following comments were made:

- unclear about the amount of test homes.
- there have been many of these proposals approved by the lowa Energy Center; believes that these
  proposals should not cost a million dollars but a few thousand dollars.
- believes that this proposal needs to be compared with the other proposals that dealt with residential efficiency.
- believes that the committee is asking the utilities to pay for all residential efficiency projects and that the Power Fund should be making investments.
- believed there should be more partnership with utilities, higher cost share, and how this activity can fit within a greater approach to engage the residential community.

Yes-0 Yes, if- Higby

No but- Codel, Gebhart, Hubbell

No-Crosbie

**1003: Marcus Biodiesel Plant** - this proposal details how a biodiesel plant would use pellets developed at landfill to fuel a biomass boiler.

The following comments were made:

- said that there is a 4-year payback and feels the plant's initial investors should be willing to invest, it should not be the role of the Power Fund.
- said that the committee should not use public money for private profit.
- asked if the technology is innovative for biodiesel plants and if it is the committee should look at this as an innovative project.
- believes that this would be an unsecured loan for private gain; believes that a loan is ok if the public would benefit from the technology, and if there is clarity that the plant does not need to secure an additional \$33 million to begin operations.
- believes that the State needs to push the biofuels industry to be more environmentally friendly.

Yes-none

Yes, if- Crosbie, Codel, Gebhart, Hubbell No but- Higby No-none

**1005: Cherokee Mental Health Institute** - this is a proposal to install a biomass boiler at the Cherokee Mental Health Institute.

The following comments were made:

- similar technology to the 1003 proposal.
- said that there is a program within the DNR that could potentially help with the cost; would like to review the technology as well as financials.
- believes that the State needs to put the right technology into the facility, but does not believe that it is the role of the Iowa Power Fund.
- asks if the applicant has looked into geothermal.
- suggests that there are opportunities in the plan to address the issues of greening state government, and there is also the opportunity to work with a revolving loan program for incremental costs.

Yes- none Yes, if- none

No but- Crosbie, Codel, Gebhart, Higby, Hubbell

No- none

**1006: Reducing Costs of Drying Distillers Grains** - this proposal seeks to improve efficiency of drying wet distillers' grain.

The following comments were made:

- OEI staff had some questions about the technology, as well as the significant contribution to the industry.
- suggested that if the project moved forward it should be loaned not granted.
- asked if this technology is patentable.
- asked if the state would profit from royalties.
- reported that he would like to fund proposals that have a clear public benefit.
- feels that whatever technology developed in this proposal should not be held confidential. He believes the funding is inverted to where it should be.
- would like to see more risk from the partners and the company.

Yes-none

Yes, if- Codel, Crosbie, Gebhart, Hubbell No but- Pat No-none

<u>1007: Clean Gasification Platform for Renewable Power</u> - this proposal seeks to improve the performance of ethanol plants through clean biomass gasification.

The following comments were made:

- questions about technology, patents, and match; who benefits from the technology research and development.
- believes that the applicants might benefit significantly from a Power Fund award without a large amount of leverage invested into the proposal.
- believes that this proposal relates to other Power Fund proposals from Iowa State University; questions how this technology compares to current technology; believes that this might qualify from a loan; would like to see a technical and a patent review; would like to see one proposal from Iowa State.
- believes we may want to fund some of their proposals at a lesser amount.

Yes-none

**Yes, if- Codel, Crosbie, Gebhart, Hubbell** No but- Higby No- none

**1008: Utilizing Low Grade Heat Pump** - this is a proposal that deals with harvesting energy from existing temperature differences.

The following comments were made:

- likes the partnerships that have engaged, and the cost share for this proposal.
- harvesting energy from low temperatures is generally very ineffective, will researchers be able to move from theory to a working model in the real world?
- would like to see a full proposal and technical review
- would like to know if the cost share is firm, and would like to see more match, as well as feedback from other technical entities.
- OEI staff has been in conversation with Iowa State about intellectual property and royalties from technology development.

Yes- Codel

Yes, if- Crosbie, Gebhart, Higby, Hubbell No but- none

No-none

**1009:** Workforce Development for Energy Leadership - this is a proposal that seeks to develop lowa's workforce.

- does not believe that workforce development fits within the scope of the Power Fund.
- reported that the Utilities are working with Iowa Workforce Development already.

Yes- none Yes, if- none No but- none

No- Codel, Crosbie, Gebhart, Higby, Hubbell

#### 1010: LEED Demonstration Project - this proposal is a residential model building.

The following comments were made:

- believes that model homes have not traditionally affected the new housing market.
- consumers do not think about the life cycle cost of an investment.
- liked the idea of a model home, but need to figure out how a project can change the building community.
- unsure about the location of the project-might be better served on a community college campus; felt there could be more opportunity for recouping of costs.

Yes- Higby Yes, if- none **No but- Codel, Crosbie, Gebhart, Hubbell** No-none

**1012: Integrated Efficiency** - this proposal deals with developing a case study for rehabbing a multi-purpose construction in an energy efficient way.

The following comments were made:

- feels this proposal has more leverage than other model efficiency homes.
- questioned what the best way to improve efficiency through education was; said that there were many
  options in front of the committee, and that this legislative session would reveal what may be the best
  direction for the fund.
- said that this could be an opportunity for a loan.
- suggested a loan guarantee.

Yes-none

Yes, if- Higby, Hubbell No but-Codel, Crosbie No- Gebhart

**1013: City of Dubuque** - this proposal is to rehab 28 buildings in a warehouse district in Dubuque using renewable energy and energy efficiency guiding principals.

The following comments were made:

- feels that this proposal is asking for a lot of funding with little match; suggests that it might be better suited for a Department of Economic Development Vision Iowa project; suggested that the Iowa Power Fund could be a component on a smaller scale with a lot more match.
- feels that the City should have the ability to raise funds.

Yes- none Yes, if- none No but- Higby

No- Codel, Crosbie, Gebhart, Hubbell

1014: Prolysis: dirty coal to Energy Independence - this project seeks to turn lowa coal into diesel.

The following comments were made:

- liked the match, but feels that it is an existing technology that has been around for years.
- said that he was concerned by using coal, and did not seem to fit into the scope of the Power Fund.
- asked if lowa coal would be the best feedstock for this proposal.
- concerned about the environmental impact, and that this proposal would need a serious technical review; should look into the issue of mineral rights and the value of the site.

Yes- none Yes, if- Higby No but- Hubbell

No- Codel, Crosbie, Gebhart

**1015: Wastewater Thermal Energy Scavenging**- this project seeks to recover waste heat off of residential systems.

The following comments were made:

- believes that this is an expensive technology and the technology may be better served in a commercial application.
- believes that residential might not be the best application for this technology.
- supports the technology with high volume users, not residential users.
- questions what can be gained through residential analysis.

Yes-none Yes, if- Higby No but- Crosbie, Hubbell No- Codel, Gebhart

#### 1016: Carbon Capturing Crops for lowa -

The following comments were made:

- the applicant is very reputable
- believes that the proposal is too basic
- believes that the work will continue in the market without the funding of this proposal; believes that the proposal is very academic but has too low cost share.
- believes that this proposal does not deal with the trends in carbon sequestration.

Yes- none Yes, if- none No but- none

No- Codel, Crosbie, Gebhart, Higby, Hubbell

#### 1017: Development of Fusarium -

The following comments were made:

- believes that this proposals technology is not valid
- there are many issues associated with the technology

Yes-0 Yes, if-0 No but-0

No-Crosbie, Codel, Gebhart, Higby, Hubbell

**1018: Unlimited Access to Public Transportation** - this proposal would be free public transit for all State of lowa employees in Des Moines.

The following comments were made:

- feels there might be some legal issues in subsidizing state employees' transit.
- said that the amount requested was questionable; believes that it has advantages but is unsure about the cost.
- believes that this program as presented would not work for State of Iowa employees.
- said that the Power Fund Board should review transportation policies.

Yes- none Yes, if- none No but- none

No-Crosbie, Codel, Gebhart, Higby, Hubbell

1019: Energy Efficient Drying Technology - this project introduced a corn drying technology.

- questions with the assumptions and technology in the pre-application; would want a confirmation that the company was working with the federal government.
- said that all the information that the committee will need will be proprietary information, and he does not know if the company would want to release the information to the public.
- was interested if this could be utilized as a retrofit technology.
- suggests that it might be a project for the Department of Economic Development (DED).

- interested in the specific application of the technology, and what is the primary market.
- suggests that the committee send it to the DED for review to see if it is an appropriate project for that agency. If funded by the Power Fund, suggests that the committee explores royalties.

Yes-none Yes, if- Higby

No but- Codel, Crosbie, Gebhart, Hubbell

No- none

### 1021: Screening Technology for Scale Up for Selection Energy Crop -

The following comments were made:

- does not understand how this project would benefit the public or the business community; not clear
  about the agreement between the companies within the proposal and those relationships would need to
  disclose those relationships; noted that there is so much proprietary information; he questions how the
  benefit could be made public.
- would like to know if they would share their results; concerned if the turn around for seed development is 10+ years it would not be feasible.
- the company is a technology looking for a market, and not a market looking for a technology.

Yes- none Yes, if- none No but- Crosbie, Hubbell **No-Codel, Higby, Gebhart** 

### 1022: Improving Nitrogen Utilization in Iowa: Trait Expression.

The following comments were made:

- believes that similar research exists; feels it is an unrealistic way to spend Power Fund money.
- believes that this is an unrealistic proposal in an economically feasible way
- feels that this is a worthy technology to invest in, believes that a technical review could be useful.
- believes that a technical review is easy, but would take a long time to get the results.
- asked if the Department of Natural Resources would have the capability to handle this type of study.
- said that the review would need to be done by microbiologists; he does not believe that the DNR has the technical expertise to review the technology.

Yes-0 Yes, if-0 No but- Higby, Hubbell **No- Crosbie, Codel, Gebhart** 

#### 1023: Improving Nitrogen Utilization in Iowa: Biochemical Optimization -

The following comments were made:

 believes that there is a lot of research going on in this area and it is a highly competitive area that many companies are involved in; suggested that the board hire a patent attorney to review the patents to see if they are viable and can be commercialized; feels the committee would need an intellectual property review for this proposal.

Yes-0 Yes, if-0 No but-0

No- Crosbie, Codel, Gebhart, Higby, Hubbell

#### **Other Business**

All committee members generally agreed that the process was a good review process.

OEI staff will --

- report on the status of the pre-applications to the Power Fund Board
- properly track applicants through the process
- determine if public comment is needed during the pre-application review meetings

Adjournment: There being no further business to discuss at t indicated the next meeting would be Tuesday,	his time, the meeting adjourned at about 5:05 P.M. It was March 4 <sup>th</sup> at IUB.
Roya Stanley, Committee Chair	Brian Crowe, Recording Secretary
Date	